



Dollar Spot on Turfgrass: *Clarireedia homeocarpa* (formerly *Sclerotinia homeocarpa*)

Introduction

The disease name is derived from the dead straw-colored spots about the size of a silver dollar on close cut bentgrass putting greens. Dollar spot may persist from early summer until early fall, and its incidence seems to be higher in seasons with low rainfall, presumably from the adverse effect of low soil moisture on host plants. It occurs on bluegrasses, bentgrasses, fescues, and zoysia. The classification of the pathogen that causes dollar spot has undergone numerous changes.

Symptoms and Signs

The pattern of symptoms depends largely on mowing practices. Under close mowing conditions the circular straw-colored spots (3 to 6 cm in diameter) are distinctly outlined in the early stages of disease development (Fig. 1).



Figure 1: Physical damage of a ball mark vs. symptoms of dollar spot (provided by Karen L. Snover-Clift, Cornell University)

With higher cutting heights, the bleached turf spots are irregularly shaped. In the early morning, when dew is still on the grass, a white cobwebby growth of the fungus may be seen over the spot. Spots coalesce to cover large areas when the disease becomes severe. On individual grass blades the damaged tissues are first water-soaked and dark colored. As they dry, the lesions turn light tan to straw-colored with a reddish-brown border (Fig. 2). The lesions first occur randomly on the leaf blade, and then frequently extend across the entire blade. Older lesions may become quite long and cause blighting of the entire leaf or cut leaf end.



Figure 2: Disease symptoms on individual blades (provided by Dr. Eric B. Nelson, Cornell University)

Disease Cycle

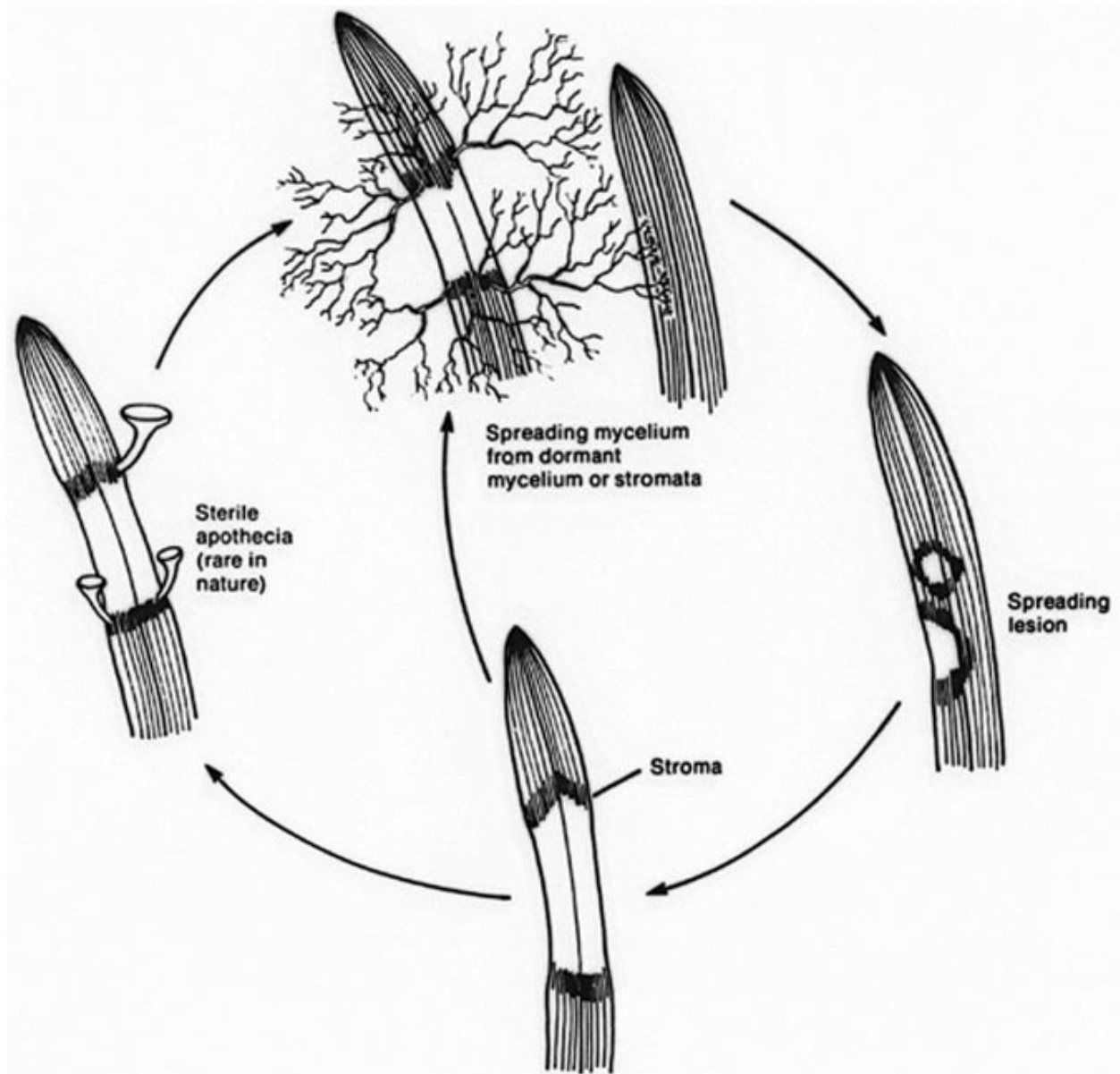
The fungus, *Clarireedia homoeocarpa*, survives unfavorable periods as dormant mycelium in infected plants, therefore, fungal movement is brought about by equipment, people, animals, wind or water. When daytime temperatures reach

16°C to 27°C (60° F to 80°F) , the dormant mycelium resumes growth from the infected leaves to nearby healthy leaves, causing new infections.

If night-time conditions become cool and dry soon after infection has occurred, or if control measures are exercised quickly, infection may not progress beyond scattered leaf lesions. If the grass is growing rapidly, the problems may disappear after one or two mowings. If favorable weather persists after infection such as warm nights, with dew forming on leaves, and if control is not achieved, entire grass plants may be killed and typical "dollar spots" may appear on the turf.

Management Strategies

Mow grasses at the recommended maximum height if possible. Try not to remove more than 1/3 of the leaf surface in any one mowing. Maintain adequate soil moisture, but avoid sprinkling in the late afternoon or evening. Do not overwater. The incidence of dollar spot is lower than on nitrogen-deficient turf. Adequate nitrogen fertilization in the late spring and summer may help prevent dollar spot, but excess applications may encourage other turf problems (e.g., brown patch, summer patch, and drought stress).



Dollar spot disease cycle.

(provided by Dr. Eric B. Nelson, Cornell University)

Varieties of bluegrasses and fescues differ in susceptibility to dollar spot. Bluegrasses which exhibit greater resistance include the improved varieties *Adelphi*, *America*, *Aquila*, *Bonnieblue*, *Bristol*, *Eclipse*, *Midnight*, *Touchdown*, *Vantage*, and *Victa*. Greater susceptibility is exhibited by varieties which include *Ram I*, *Mystic*, *Estar*, *Gnome*, and *Pennstar*. Fescues which are more resistant include *Jamestown*, *Agram*, *Checker*, and *Shadow chewings*, *Biljart*, *Reliant*, *Scaldis*, and *Tournament* hard fescues.

For a list of specific products for homeowners in New York State, please refer to our [turf fungicide table](#). Be certain any formulation of pesticide you purchase is registered for the intended use, and follow the label instructions. The label may also provide information on frequency of applications to obtain better control and any precautions to take to limit development of resistance of the pathogen to the fungicide.

Additional products containing other active ingredients may be available for use by commercial applicators. Please refer to the appropriate commercial pest management guidelines, or contact your local Cooperative Extension Office for more information on currently registered products.

Reference:

Compendium of Turfgrass Diseases, Third Edition, 2005. R.W. Smiley, P.H. Dernoeden and B.B. Clarke. APS Press.

Salgado-Salazar, C., L.A. Beirn, A. Ismaiel, M.J. Boehm, I. Carbone, A.I. Putman, L.P. Tredway, B.B. Clarke and J. Crouch. 2018. *Clarireedia*: A new fungal genus comprising four pathogenic species responsible for dollar spot disease of turfgrass. *Fungal Biology*. <https://doi.org/10.1016/j.funbio.2018.04.004>.

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READ THE LABEL BEFORE APPLYING ANY PESTICIDE! Changes in pesticide regulations occur constantly. All pesticides distributed, sold, and/or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office.

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